

To bee or not to bee, that is the risk

3-17-91

■ **Pollination:** Insects are vital for orchards, other crops. But low honey prices, freezes sting many Utah keepers.

Spring is on the way and that means it's time for ... pollination!

No, this isn't a story about the birds and the bees — just the bees; specifically, *Apis mellifera*, the common honey bee, without whose efforts Utah orchards would have a lot of nice green leaves but not much fruit.



MAX B. KNUDSON
DESERET NEWS
BUSINESS EDITOR

Same goes for most of the other produce that fills your neighborhood supermarket, whether it's an apple from Washington, a can of almonds from California or a fresh batch of guacamole from Mexican avocados: no bees, no goodies.

For that matter, no milk or beef, either. Honey bee-pollinated crops such as alfalfa hay and various clovers are the mainstay of livestock. The U.S. Department of Agriculture estimates that a third of all food eaten in the country is tied to pollination.

We're not talking nickels and dimes. A 1989 study by Cornell University indicates the direct value of honey bee pollination to U.S. agriculture is \$9.7 billion a year. The U.S. Department of Agriculture goes even further, putting the annual value of pollination at a whopping \$20 billion.

"Honey bee pollination affects about ev-



William R. Jones examines a bee colony in Bluffdale. He keeps most of his bees in Washington County.

PHOTOGRAPHY/ O. WALLACE KASTELER

complete PC. Most computer-to-computer don't already own a fax, the combination.

Apple dropped its AppleLink belongs to quality. Their modem internally. (For dealer 33-0300.) The others inside your computer explained how. They all come programs.

ams receive faxes in You can be typing analyzing spreadsheet program picks up incoming faxes on your computer Mac program only background, substitute are from Solutions phone (802) 658-5506 your nearest dealer.) ls we tested are free. It's the software t now makes the big en brands.

their first fax board be Goldberg invent-strewn all over. The ually awkward. We good-looking fax, d ASCII files. Lost rlines and different

AXion board now performs smoothly. est software solves oblem. You needn't to the phone line. It prets and reroutes mally sent, format-

Hayes and Complete PC software do the same thing: Their programs fax files as if printing to a printer. The make-believe printer is only a simple old nine-pin Epson dot matrix model, such as the MX-80 or RX-80. The output looks definitely computer. We find it a small price to pay for being able to zap something right from our computer into a distant fax machine.

On the Mac, the BackFAX software operates in much the same way. There's one big difference. It can handle files set up to print to Postscript printers. You can zap tall and tiny type, grey background tones and dozens of typesetting fonts. What you send looks as good as if you'd used a great stand-alone fax machine.

Our test results suggest some recommendations. For Mac or Apple owners: Orchid fax modem which is bundled with BackFAX. For IBM compatible owners, it depends on your needs.

If price is most important, Hayes JR4800 is cheapest. It comes without a modem and retails for \$200.

If you're on a LAN, or expecting to network soon, get Intel's SatisfAXion. With Conetic Systems' Higgins To: FAX software, a single Intel fax board can accommodate everyone connected in the LAN.

We like the way Intel's software stores and retrieves information. It lets us group names and addresses into subdirectories within one fax-phone database. Other fax software makes us keep separate directories.

Jerry Petersen
Utah sales manager,
Nationwide Insurance Co.

VITAL STATISTICS

Age: 57.

Where born: Lincoln, Neb.

Family: Wife Elaine and children Nancy Hopkins, Kristin, Patricia, Brian and Kathleen Petersen.

Education: Bachelor of science and master of science in marketing and finance, Brigham Young University.

Primary products: Automobile and homeowners insurance.

Primary markets: All of Utah.

Number of employees: 13 in sales department and 20 in claims department.

Annual sales: \$5 billion (corporate).

PERSONALITY PROFILE

First "real" job: Selling cast iron pipe and fire hydrants.

Management style: Let good people do their job — be the coach.

Strategy for success: Give "Golden Rule" service.

A memorable failure: I ignore them as they invariably lead to greater success.

Heroes: Abraham Lincoln and my father.



PHOTOGRAPHY/O. WALLACE KASTELER

Leisure time and hobbies: Searching for Western relics; writing and Senior's Track competitions.

Favorite book and movie: "Men to Match My Mountains"; "Somewhere in Time."

KEEP

Continued from D13

BEEES

Continued from D13

St. George area. When a bee's body

keep just barely warm enough to survive the winter by swarming together and beating their wings, generating heat.

If you think you would like to learn more about beekeeping as a hobby, the Utah Beekeepers' Association

several species of beeswax annually, as well as several lesser-known substances such as bee pollen, bee venom and royal jelly.

In Utah, honey production in 1989 was just under 2 million pounds from some 43,000 colonies. As with any commodity, the price fluctuates. In 1989, according to USDA statistics on Utah, the price per pound averaged 53 cents, down considerably from 1988's 61 cents. The 1989 figures would put the total annual Utah honey crop at just over \$1 million, the latest year for which figures were available.

Jones had no numbers for 1990, but said it was a "disastrous" year, mainly due to two killing frosts early in the season that "eliminated much of the nectar at a critical time."

Jones maintains 700 hives or colonies in Washington County and a few in Bluffdale, Salt Lake County. Jones is a "handler" as well as a producer, meaning he normally will buy honey from other beekeepers. "In 1989 we bought 100 barrels from other producers," he said. "In 1990, nothing."

While Utah's agricultural industry is not large enough to attract out-of-state beekeepers seeking pollination fees, Jones said there are a few local beekeepers who take their show on the road, usually to California. Jones makes it clear he isn't happy about this.

The problem, he said, is that taking bee colonies out of the state and then bringing them back increases the chances of introducing one of the two varieties of bee mites that have recently entered the United States. These pests, he said, can shorten the already brief (about 40 days) life span of the honey bee.

"It's a free country, but it's a problem that ought to be recognized," Jones said.

No article about bees would be complete without mentioning 1. stings and 2. African killer bees. While the sight of a bee buzzing around the patio sends some people running for the Raid, Jones — who

Beehive State has long history, high regard for its honeybees

By Max B. Knudson 3-17-91
Deseret News business editor

Beekeeping as an occupation and a hobby originated centuries ago in Asia and Europe, says Dr. James Tew of the Apiculture Extension Service, U.S. Department of Agriculture.

In the 1600s, the American colonists apparently longed for honey, a sweetener they had enjoyed "back home." Thus, they imported honeybees from Europe to Jamestown, Va.

"Because the American Indians had never seen bees and did not know what bees could contribute, they simply thought the strangers had brought in a new kind of 'fly,'" Tew said.

During the next 200 years, beekeeping grew steadily until honeybees became a familiar sight across North America.

Although William Jones, secretary of the Utah Beekeeping Association, concedes that Utah is "not a great bee state" because of its comparatively small agricultural industry, there are

few other people who have higher regard for the tiny winged insects.

Indeed, we live in "the Beehive State," and this symbol of industry can be found all over Utah, including on the state seal. The word "Deseret," this newspaper's name and the name of the original State of Deseret, part of which later became Utah, literally means "honeybee."

An early use of the word "deseret" comes from the book of Ether in the Book of Mormon, where it says, "And they did also carry with them deseret, which, by interpretation, is a honeybee; and thus they did carry with them swarms of bees."

An early Utah history book says the beehive symbolizes thrift, unity, perseverance and industry — values necessary for survival in the early West of the Mormon pioneers.

As a national industry, beekeeping grew dramatically during the first half of this century. During World War II, when sugar was rationed, managing bees for honey production gave Ameri-

Please see KEEP on D14

has been stung many times but takes no more notice than the rest of us do to a mosquito bite — says there are only two reasons for a bee to sting: to protect itself and to protect its property.

In other words, leave it and its hive alone and it will leave you alone.

As for so-called African "killer" bees, Jones said their reputation has been greatly exaggerated — by Hollywood mostly. And despite recent news reports that colonies of Africanized honey bees are moving

northward into the United States (they originated in Brazil in 1956 when aggressive African strains were accidentally released into the countryside), Jones said these tropical strains are ill-suited to life as far north as Utah.

Even the European honey bees found throughout the United States have a hard time with Utah winters — the reason Jones keeps most of his colonies in the

Please see BEES on D14

Utah, not being a major agricultural state, only has a small piece of that action. According to William R. Jones, owner of Jones Bee Co., Murray, and secretary of the Utah Beekeeping Association, Utah has about 500,000 acres of alfalfa pasture and 1,400 acres of orchards, a tiny fraction of the state's total 54.3 million acres and a relatively small chunk of land requiring annual pollination — including all the state's backyard gardens.

Consequently, of the nation's 250,000 beekeepers (most of them hobbyists, not professionals), only about 1,000 of them are in Utah and only a dozen or so could be classified as commercial operations, the largest being Salt Lake-based Miller Honey Co., a household name among Utah consumers.

Because of the limited agricultural acreage in Utah, Jones said, there isn't enough demand for pollination to attract out-of-state beekeepers who rent their bee colonies to farmers specifically for pollination of their fields and orchards. (Ninety-five percent of all honey bees rented for crop pollination are used for apples, cherries, melons, almonds, alfalfa seed, plums, avocados, blueberries, cucumbers, pears, sunflowers, cranberries, vegetable seeds and kiwi fruit.)

In Utah, pollination fees are only a sideline to the beekeeping business — the state's cherry crop being the only crop cited in the Cornell study as normally requiring rental of bee colonies for pollination. Jones said there is a limited amount of rental business for Utah beekeepers but not enough to make a living. For one thing, orchards are in bloom only a short time.

Monetarily, honey production is a secondary issue in the beekeeping industry, compared with pollination, but it's still significant. Honey bees across the United States produce about 250 million pounds of honey a year, a crop valued at \$200 million. Honey bees also produce 4 million

financial information shares.

personal interests, the team's wishes or user. Organizational high personally satisfying, must, at the aggressive and driven. is sought, so too is the and challenges to

function in an environment good enough never confidence, coming and other convenient processes managed. There is each goal is accomplished and the new even more invigoration is to be very wary when launching a organizational culture. It just a few words about boss. But if it's after most — don't

a Park City based consultant who has implemented processes in large and size organizations United States.

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Also, beeswax was an essential component of machine lubricants used by the military.

It was during that war, said Tew, that people began to realize how important honeybees are to crop pollination. Records show that prior to 1941, the United States had 4.3 million honeybee colonies. By 1947, that number had increased 27 percent to 5.9 million colonies.

Today, there are 250,000 beekeepers (mostly hobbyists) managing some 4 million colonies, mostly in rural settings but occasionally in back yards, rooftops and even balconies of high-rise apartments. So called "migratory beekeepers," about 1,600 nationwide, take their colonies around the country to provide pollination services to agriculture.

The bee industry is specialized. One segment focuses on the sale of bees, as opposed to bee products, selling the insects several thousand to a package to begin new colonies. Queen bees, for breeding, are sold individually.

The queen bee lays eggs and rules the hive with chemical messages called pheromones. Worker bees, sterile females, do all the work of the hive. Drones, male bees, have only one function: fertilize the queen in her first few days of life.

As worker bees gather pollen and nectar from blossoms, pollen that has stuck to their hairy bodies falls into and fertilizes the flowers they contact, thus unintentionally pollinating more than 90 cultivated crops.

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Bountiful Attorney, Del B. Rowe, is an estate planning attorney who will speak regarding the new Supreme Court Law on your "right to die" and on Family Living Trusts to avoid probate. Mr. Rowe, is a member of the Bountiful area Chamber of Commerce and the St. George Area Chamber of Commerce and has lectured throughout the state for various groups including: Thiokol, BLM, Hercules, Western Area Power Administration, U.S. Postal Service, BYU Education Week, Seniors Games, Senior Citizen's Centers and numerous church and civic groups.

temperature runs down to degrees Fahrenheit, he said, it can't even crawl, let alone fly. The colon

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BEES

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St. George area. When a bee's body temperature falls below 43 degrees Farenheit, he said, it can't even crawl, let alone fly. The colonies

keep just barely warm enough to survive the winter by swarming together and beating their wings, generating heat.

If you think you would like to learn more about beekeeping as a hobby, the Wasatch Bee Club meets monthly. For information, contact Wilford Wouden, president, at 973-0705.

8-17-91